



LOCAL RESOURCES PROGRAM

Recycled Water and Groundwater Recovery Projects

Request for Proposals

June 1998



MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

REQUEST FOR PROPOSALS

**FOR PARTICIPATION IN THE
LOCAL RESOURCES PROGRAM**

RFP No. PR-1

NOTICE:

Public Pre-Submittal Workshop

August 12, 1998

10:00 a.m. - 1:00 p.m.

Metropolitan Water District Headquarters

350 S. Grand Avenue, 3rd Floor, Rm. 311

Los Angeles, California 90071

All potential applicants are encouraged to attend

Brian G. Thomas

Assistant Chief of Planning and Resources

LOS ANGELES, CALIFORNIA

June 19, 1998

RFP No. PR-1

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**LOCAL RESOURCES PROGRAM
REQUEST FOR PROPOSALS**

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The Metropolitan Water District of Southern California

Planning and Resources Division Local Resources Program

Request for Proposals

The Metropolitan Water District of Southern California (Metropolitan) invites proposals for the development of cost-effective water recycling and groundwater recovery projects that contribute to the region's overall water supply reliability. Selected projects will be eligible for financial assistance through Metropolitan's Local Resources Program (LRP). Metropolitan anticipates issuing similar competitive Request for Proposals (RFP) every two years. This RFP contains information concerning project requirements, funding limits, proposal review process and selection criteria.

Due Date

Proposals responding to this RFP will be accepted at The Metropolitan Water District of Southern California, Planning and Resources Division, Local Resources Program Branch office, 350 South Grand Avenue - 10th Floor, Los Angeles, California 90071 until 4:00 p.m. on **October 1, 1998**. Six copies of each proposal must be submitted. Proposals received after the due date and time will be returned unopened.

Questions

Questions regarding this RFP may be presented at the public pre-submittal workshop on August 12, 1998. Written questions regarding this RFP may also be submitted prior to the meeting. Responses to questions will be provided at the workshop. Address questions to:

Mr. Andrew Sienkiewicz
Local Resources Program Branch
Metropolitan Water District of Southern California
350 S. Grand Avenue, 10th Floor
Los Angeles, California 90071
FAX: (213) 217-6970
e-mail: asienkiewicz@mwd.dst.us.ca

Public Pre-Submittal Workshop Notice

Purpose: Discuss the Local Resources Program RFP and answer questions

Date: August 12, 1998

Time: 10:00 a.m. - 1:00 p.m.

Address: 350 S. Grand Avenue, 3rd Floor, Rm. 311
Los Angeles, California 90071

All interested parties and prospective applicants are encouraged to attend.

A. PROCESS OVERVIEW

Selected projects will be eligible to receive funding assistance only if an agreement with Metropolitan is executed. Funds may be provided for certified deliveries of project water on a dollars per acre-foot basis.

Project proposals will be evaluated by a review committee. After the review committee's recommended project mix is reported to Metropolitan's Board of Directors for information, staff will meet with each project sponsor and respective member agency to negotiate agreement terms. Upon approval of the draft agreement by the project sponsor's governing body and completion of environmental documentation, each project will be forwarded to Metropolitan's Board for approval of LRP participation. Upon approval, an agreement would be finalized and executed. Note that Metropolitan will execute the agreement only after all other parties have signed and that all agreements must be executed before April 1, 2000.

Metropolitan, at its sole discretion, may reject any and all proposals and revise the terms of the LRP.

B. BACKGROUND

The Metropolitan Water District of Southern California is a California public agency. Metropolitan imports water from the Colorado River and State Water Project to supply its 27 member agencies which in turn serve water to approximately 16 million people living within a 5,200 square-mile service area. Existing Metropolitan facilities include the 242 mile-long Colorado River Aqueduct with five pumping plants, a distribution system having seven functional reservoirs, five water filtration plants, 43 pressure control structures, 15 power plants, and approximately 775 miles of large diameter pipelines. Metropolitan also

participates in the development of local water resources to maintain regional supply reliability.

Metropolitan's three existing assistance programs, the Local Projects Program (LPP), the Groundwater Recovery Program (GRP), and the Temporary Local Resources Program (TLRP) are being phased out and replaced by the new Local Resources Program (LRP). Locally developed water under Metropolitan's programs improves regional water supply reliability and cost by reducing requirements for future Metropolitan capital improvements and water importation. Since 1982, Metropolitan's programs have supported more than 325,000 acre-feet (AF) of production with nearly \$55.5 million in financial assistance for 40 operating projects owned by local agencies. There are 13 additional agreements for projects not yet operational.

C. INTEGRATED RESOURCE PLAN

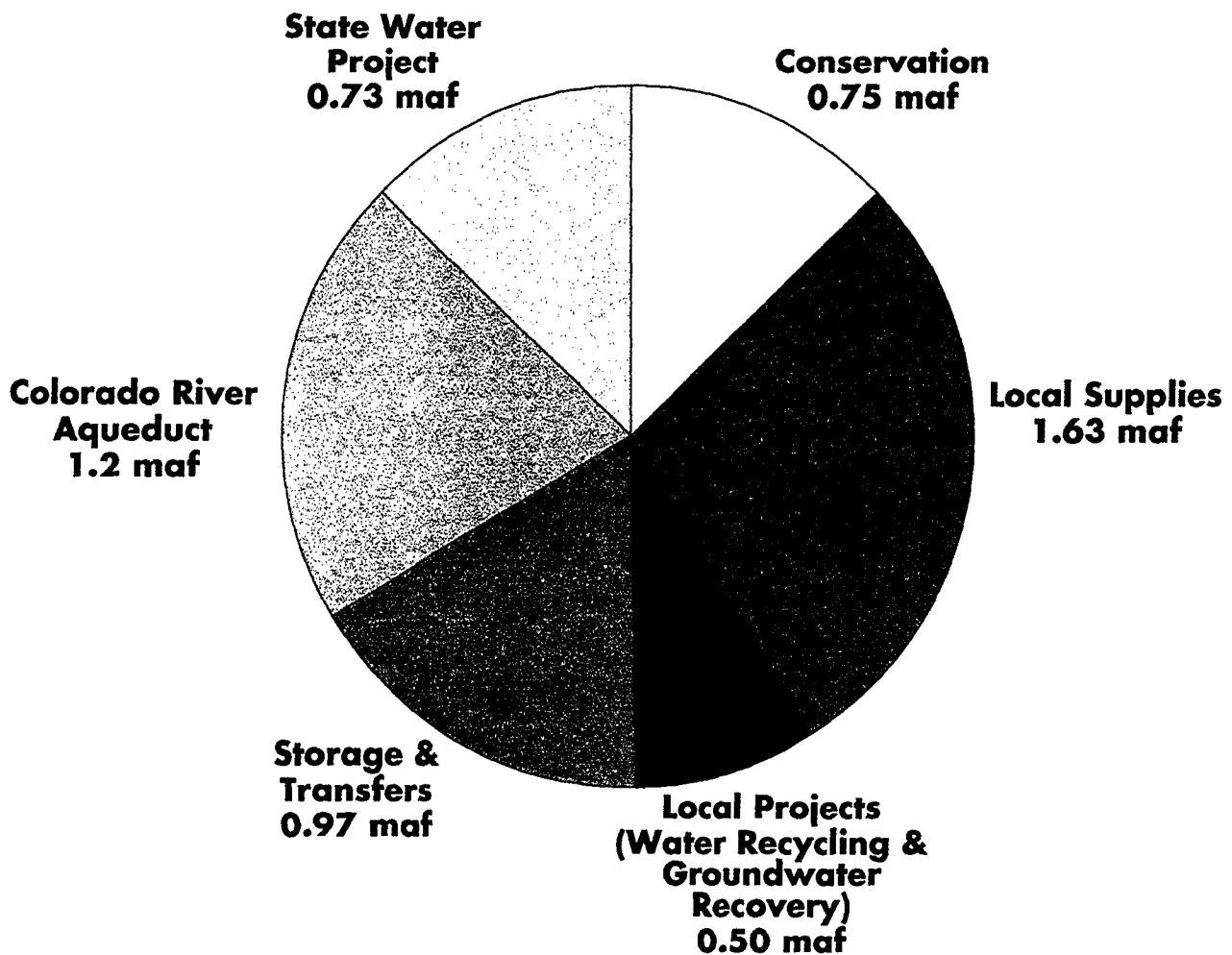
Metropolitan's Integrated Resource Plan (IRP) identified goals for a diverse mix of six local and imported water resource elements optimized to meet future supply reliability in a cost-effective manner. The IRP sets initial targets for resource development that the region must achieve for water supply reliability through the year 2020. Figure 1 illustrates Year 2020 targets for each element of the IRP Preferred Resource Mix. Year 2020 target production for the combined water recycling and groundwater recovery elements is 500,000 acre-feet per year (afy), of which about 225,000 afy is already being produced. In response to changing conditions, Metropolitan will regularly assess the need for additional production and update the resource targets.

IRP studies show reduced long-term costs to the region when local resources are developed due to downsizing or deferral of Metropolitan's capital improvements, reduction in operating costs for importation, treatment and distribution, and reduction in costs for developing alternative regional supplies. The range of contributions proposed for the LRP (\$0 to \$250 per acre-foot) compares favorably with the estimated range of benefits from these lower costs. Encouraging water recycling and groundwater recovery projects by providing financial assistance is consistent with the IRP goals approved by Metropolitan's Board of Directors in June 1995 as the strategy to meet future water supply reliability needs of Metropolitan's service area in a cost-effective manner.

D. LOCAL RESOURCES PROGRAM

The LRP is designed to encourage development of recycled water and recovered groundwater through a process that:

Figure 1
Integrated Resources Plan*
Resource Targets During a Dry Year
YEAR 2020



Total Demand = 5.78 maf

* IRP results as of June 1995

- emphasizes cost-efficiency to Metropolitan;
- times new production according to regional need; and
- minimizes administrative cost and complexity.

The LRP includes uniform criteria for financial assistance to locally-owned projects that recycle water or recover degraded groundwater and contribute to regional water supply reliability. Metropolitan will provide assistance from \$0 to \$250 per acre-foot of production for agreement terms up to 25 years.

Based on past performance of projects participating in Metropolitan's assistance programs, it takes about ten years for project yield to reach capacity. To that end, this RFP seeks to meet the shortfall in needed local resource production occurring 10 years after agreement execution (Figure 2 and Table 1). It is expected that this production will continue on a permanent basis beyond year 2010. The LRP will not consider projects that are temporary.

Table 1
Needed Local Resource Production

<u>Year</u>	<u>Needed Production (afy)</u>
2000	17,000
2005	24,000
2010	53,000 (ultimate)

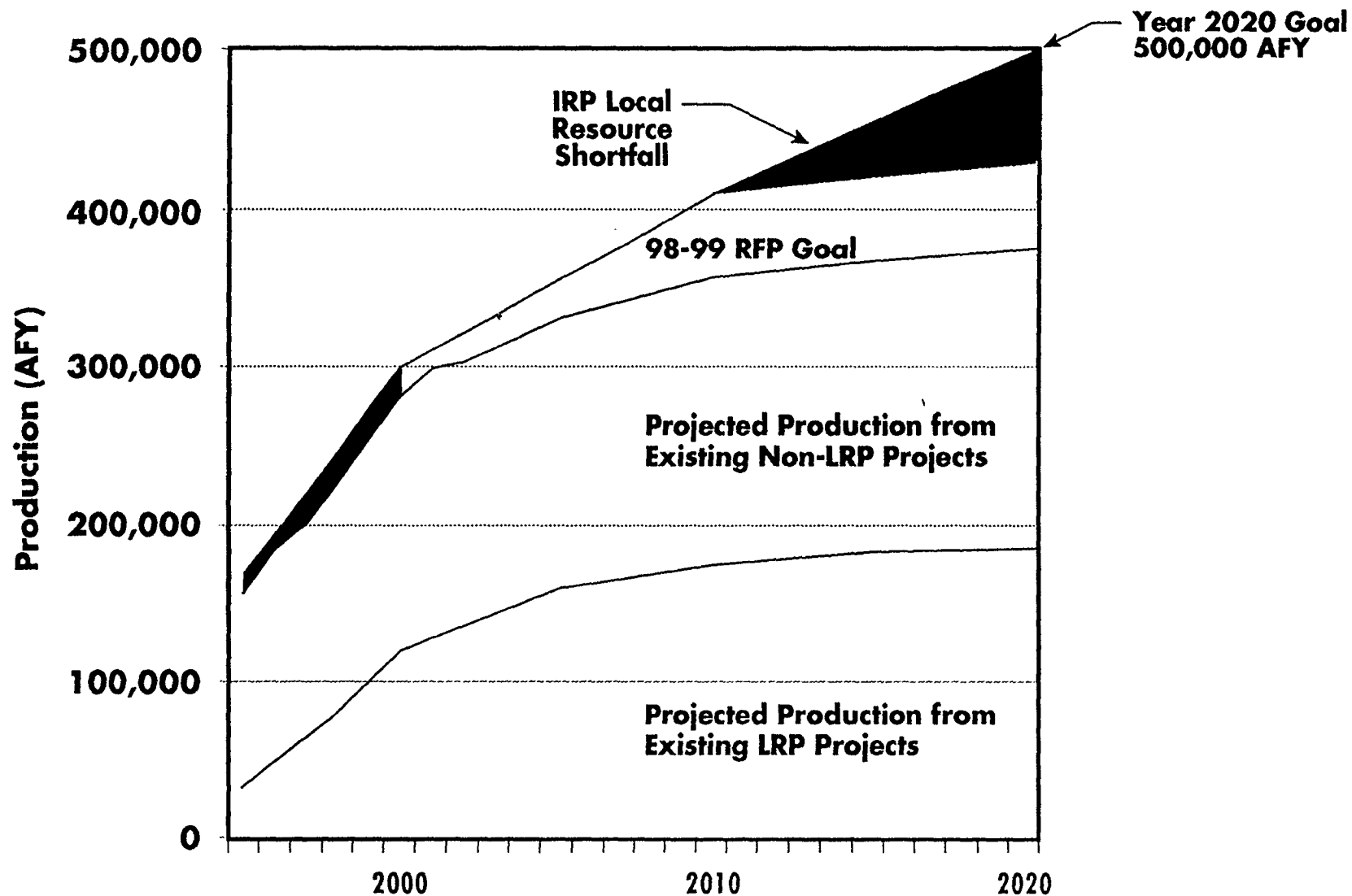
The values in Table 1 may be increased as the ongoing IRP update progresses. Metropolitan will also routinely compare updated IRP local resource targets for water recycling and groundwater recovery to forecasted production. Projected shortfalls to meeting the regional targets will constitute the need for additional production to be sought in subsequent RFPs.

E. WHO CAN APPLY?

The LRP is open to public and private water utilities within Metropolitan's service area. Owners of existing projects participating in Metropolitan's recycled water and groundwater recovery programs are also invited to submit proposals for expanded production over their contractual limits provided that the expansion involves construction of new facilities. Applications for LRP consideration must be made through the project sponsor's respective Metropolitan member agency.

Figure 2

LOCAL RESOURCES PROGRAM GOALS



F. SELECTION PROCESS

Five people are expected to serve on the review committee, including two water resource professionals (consultants) selected by Metropolitan staff in consultation with the member agencies and three members of Metropolitan's staff. The committee will provide an objective evaluation of project proposals. The review committee will identify the mix of project proposals that best meets the region's needs consistent with the RFP. The committee will recommend a project mix that would be in Metropolitan's best interests to most nearly meet the production amounts listed in Table 1.

G. SCORING CRITERIA

The review committee will use the scoring criteria below to guide its ranking of project proposals. In addition, based on its knowledge of regional water supply practices, the review committee will identify and weigh each proposal's significant strengths, weaknesses and miscellaneous issues. Recommendations will reflect the collective findings of the committee. Interviews of project sponsors may be requested by the review committee

1.	Readiness to Proceed	(0-15 points)
2.	Diversity of Supply	(0-10 points)
3.	Regional Water Supply Benefits	(0-20 points)
4.	Water Quality Benefits	(0- 5 points)
5.	MWD Facility Benefits*	(0-10 points)
6.	Operational Reliability and Probability of Success	(0- 5 points)
7.	Increased Beneficial Uses	(0- 5 points)
8.	Cost to Metropolitan	<u>(0-30 points)</u>

Maximum Score: 100 points

*MWD staff will also provide a separate analysis for review committee consideration.

H. SCHEDULE

It is anticipated that the recommended list of projects for inclusion in the LRP will be reported to Metropolitan's Board for information purposes in December 1998. Thereafter, Metropolitan would begin negotiating agreement terms. Then, upon approval of a draft agreement by the project sponsor's governing body and completion of environmental documentation, each project will be forwarded to Metropolitan's Board for

approval of LRP participation. Upon approval by Metropolitan's Board, agencies would have until April 1, 2000 to execute agreements. Thereafter, they would have to resubmit their project proposals to subsequent RFPs in order to be considered for LRP assistance. Figure 3 shows the LRP implementation process with milestone dates.

I. PERFORMANCE TARGETS AND ADJUSTMENTS

Performance targets will be incorporated into all LRP agreements. These targets allow Metropolitan to adjust or withdraw financial commitments to projects that fail to meet development and production commitments made in project proposals. Failure to meet LRP performance provisions would result in adjustments to the amount of scheduled production Metropolitan would support and, in extreme cases, complete withdrawal of MWD commitment to the project. Table 2 summarizes expected performance provisions and consequences if targets are not achieved.

J. PROPOSAL GUIDELINES

Project proposals must be supported by a Metropolitan member agency. The proposal must include a signed statement from the supporting member agency's water manager to Metropolitan's General Manager supporting the project and requesting LRP consideration. Proposals must also include a transmittal letter signed by the project sponsor's manager. The letter shall include the following language:

"I am informed and believe and do certify under penalty of perjury that the information contained in this proposal is true and that the supporting data is accurate and complete."

The following format and content requirements must be adhered to in order for project proposals to be considered responsive to this RFP. Specifically, use the numbering and lettering system outlined in these guidelines. Concise yet informative proposals within the page limitations are encouraged. Ambiguous proposals will result in lower scores.

Limitations for each section of the proposal are shown and must not be exceeded. The proposal must be on 8 1/2 x 11 size paper, with black and white text (with font no smaller than 12 point, and table/graphics with text no smaller than 10 point). The proposals must be stapled on the left side or upper left hand corner; no other type of binding will be accepted. **Proposals that are not in conformance with the following format/content requirements will be considered non-responsive and rejected.**

Figure 3
LOCAL RESOURCES PROGRAM
IMPLEMENTATION PROCESS DIAGRAM

Initial Timeline

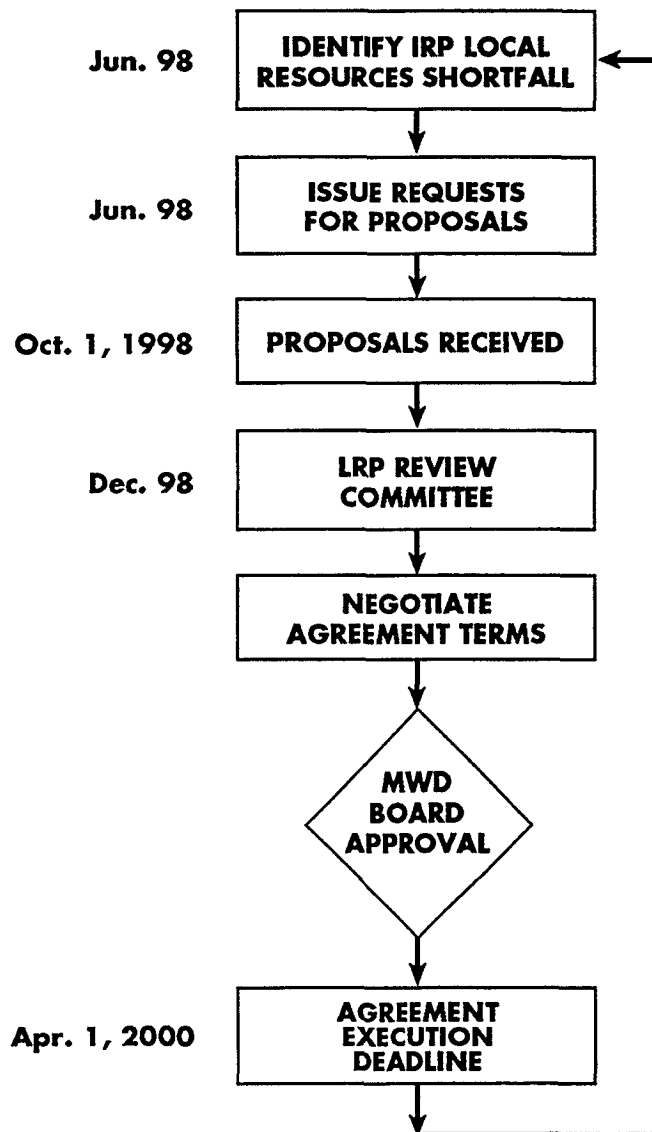


Table 2

Performance Provisions

Until a project reaches its ultimate yield, the following performance provisions apply.

<u>Years*</u>	<u>Target</u>	<u>Consequence if Target is Not Achieved</u>
2	Start construction	Terminate agreement
6	Start deliveries	Terminate agreement**
5-8	37% of ultimate yield	Reduce ultimate yield by one-half the target shortfall using the highest annual yield in the 4-yr period
9-12	63% of ultimate yield ***	Same as above
13-16 and every 4 yrs thereafter	75% of ultimate yield ***	Same as above

* Full fiscal years following agreement execution date or amendment date for LPP to LRP conversions.

** Agencies may appeal termination to Metropolitan's Board of Directors.

*** Ultimate yield or revised ultimate yield (if applicable)

RFP No. 1

FORMAT/CONTENT REQUIREMENTS

For the purposes of this RFP, project sponsor shall mean the agency that is contractually responsible for project implementation.

1. Minimum Requirements (4 pages maximum)

Explain how the project complies with each of the following minimum requirements for LRP participation.

- 1A. The project must improve regional water supply reliability by complying with one or more of the following:
 - 1A(i) Production of recycled water for any beneficial use must replace an existing demand or prevent a new demand on Metropolitan's imported supplies;
 - 1A(ii) Projects that recover contaminated groundwater for municipal and domestic use must be able to sustain groundwater production during a three-year shortage period without receiving replenishment service from Metropolitan.
 - 1A(iii) Projects that replenish groundwater basins with recycled water or uncontrolled runoff must increase regional groundwater pumping and thereby replace a sustained existing demand or prevent a sustained new demand on Metropolitan's imported supplies.
 - 1A(iv) All groundwater recovery and replenishment project proposals must include an appropriate accounting methodology to measure the increase in basin and regional production over existing levels.
- 1B. The project must include construction of substantive new facilities. For the purpose of this RFP, new facilities are at the utility-level of treatment or distribution and exclude improvements to the end user's distribution system beyond the point of connection to the project or construction of new connections to end users.

NOTE: Eligible recycled water projects typically involve construction of transmission, tertiary treatment and distribution facilities. Project elements that are developed in order to meet National Pollution Discharge Elimination System (NPDES) and waste discharge requirements for wastewater disposal only are ineligible. Groundwater recovery projects typically involve collection and treatment of contaminated groundwater for municipal and domestic uses. Projects that involve only blending of low quality groundwater without treatment are ineligible under program rules.

- 1C. The project must comply with the Metropolitan Water District Act and all other applicable laws.
 - 1D. Proposals must include the anticipated date of environmental certification. The project must comply with the provisions of the California Environmental Quality Act (CEQA) before Metropolitan's Board of Directors acts on approval. Metropolitan will function as a Responsible Agency. Metropolitan may reject participation in a project solely on environmental grounds.
 - 1E. The project must not be existing or under construction prior to agreement execution. Projects that have entered Design-Build contracts are considered under construction. Exploratory wells and data collection facilities, rehabilitation of nonfunctional/abandoned facilities, and construction of minor segments to avoid future conflicts with other projects may proceed.
2. Project Description (8 pages maximum plus maps and/or figures)
- Provide a thorough description of the project including:
- 2A. Project title and lead sponsoring agency;
 - 2B. Project participants/cooperating agencies;
 - 2C. Project water supply objectives;
 - 2D. Abbreviated project schedule including design, environmental documentation, construction, operation, production and major milestones;
 - 2E. Project cost factors including grants, capital, O&M, financing; and
 - 2F. Water supply objectives and need for the project.
 - 2G. Provide project map(s) showing location of proposed project, primary facilities, and proposed user sites including interties and points of connection.
 - 2H. Describe existing water supply/distribution facilities and user sites related to the project service area.

- 2I. For expansion projects, explain:
 - 2I(i) the physical relationship between existing and expansion features;
 - 2I(ii) the relationship of existing financial assistance agreements with Metropolitan, if any, to proposed new facilities; and
 - 2I(iii) describe current and expected future production from the existing project and construction of new facilities to expand existing production.
- 2J. Describe pertinent mandatory use ordinances, if any, adopted by the project sponsor's governing board.
- 2K. Describe anticipated regulatory requirements for the project.

3. Detailed Information for Scoring (4 pages maximum per scoring item)

Item 3A. Readiness to Proceed (scoring range 0-15 points)

- 3A(i) Indicate key project milestone dates: Provide construction schedule including completion date and project delivery date. Where pertinent, provide phasing schedule including total capital expenditures and production associated with each respective phase.
- 3A(ii) Address status and schedule for acquiring regulatory approvals and permits.
- 3A(iii) Provide status of design (percent complete to date).
- 3A(iv) Provide status of CEQA documentation and schedule.
- 3A(v) Discuss uncertainties, if any, in project planning.
- 3A(vi) Discuss status and strategy for project financing. Provide letters documenting commitments for project funding (e.g., state loan document, federal funding legislation naming the project, governing board decisions of participating agencies, etc.). Provide construction financing plan (include interest rate and term where applicable). Provide information on status and timing of financing, grants, and other contributions. Address financial and economic feasibility of proposal.
- 3A(vii) Provide status of securing all necessary project right-of-ways.
- 3A(viii) Describe anticipated regulatory requirements for the project.
- 3A(ix) Describe pertinent mandatory use ordinances, if any, adopted by the project sponsor's governing board.

- 3A(x) Describe the project sponsor's governing body endorsement of the project, if any. Statement may be attached.
- 3A(xi) Summarize firm commitments, if any, by customers for project water.
- 3A(xii) Describe any positive or negative community reaction to the proposed project.
- 3A(xiii) Describe any Metropolitan actions required by the project in addition to the requested financial assistance.

Information provided in responding to the instructions for Item 3A should address the following review committee evaluation questions:

- *Is project construction likely to proceed as projected? Are there uncertainties with respect to CEQA compliance? planning/design/permits? required agreements?*
- *Has the project sponsor's governing board endorsed proceeding with the project?*
- *Is there multi-agency support for the project?*
- *Has the project sponsor secured financing?*
- *Has the project sponsor secured necessary right-of-ways for the project?*
- *Does the project have firm markets for product water for the duration of the agreement for assistance from Metropolitan*

Item 3B. Diversity of Supply (scoring range 0-10 points)

- 3B(i) Describe the existing diversity of supply at the project sponsor level.
- 3B(ii) Discuss how project increases the diversity of supply at the project sponsor level.

Information provided in responding to the instructions for Item 3B should address the following review committee evaluation questions:

- *To what extent does the proposed project improve local supply diversity?*

Item 3C. Regional Water Supply Benefits (scoring range 0-20 points)

- 3C(i) Describe expected project benefits to regional water supply.

- 3C(ii) For groundwater projects, explain appropriate accounting methodology to measure the change in basin production over existing levels.
- 3C(iii) Explain whether project yields are primarily for supply produced during shortages and peak demand periods or when imported water supplies are abundant and system capacity is available.
- 3C(iv) Describe the seasonal nature, if any, of project production.
- 3C(v) Describe the amount of Metropolitan imported water required to make the project viable and the nature of the need. Also describe the relationship between the project sponsor and the replenishment agency and the institutional arrangement for curtailing imported water replenishment deliveries during a three-year shortage.
- 3C(vi) For groundwater production projects, discuss the project's and groundwater basin's ability to sustain production during a three-year shortage period without receiving replenishment service from Metropolitan.

Information provided in responding to the instructions for Item 3C should address the following review committee evaluation questions:

- *Does the project increase local supply during periods of shortage and/or emergencies?*
- *Will the project provide sustained water supply benefits?*
- *To what extent does the project reduce reliance on imported supplies to supplement local surface and groundwater supplies?*
- *Does the project affect local water supply planning for other agencies?*
- *Will project yield provide potable water uses?*
- *Is blending or replenishment with imported water supplies needed?*
- *For groundwater projects, does the proposal provide an adequate accounting methodology to measure the change in basin production over existing levels? To what extent does the proposed methodology minimize administrative complexity?*
- *Will production be reduced if imported replenishment water is curtailed?*

Item 3D. Water Quality Benefits (scoring range 0-5 points)

- 3D(i) Describe expected project benefits, if any, to regional water supply quality.

Information provided in responding to the instructions for Item 3D should address the following review committee evaluation questions:

- *To what extent does the project provide local or regional water quality benefits?*
- *Are the project's water quality improvements integral to plans adopted by a regional water quality control board or basin management authority?*

Item 3E. MWD Facility Benefits * (scoring range 0-10 points)

- 3E(i) Identify the Metropolitan feeder and service connection that will experience reduced demand as a result of the project. Quantify the amount of reduced demand and provide breakdown if in more than one location.
- 3E(ii) Describe to what extent the project reduces peak demands on Metropolitan's system.

* MWD staff will also provide a separate analysis for review committee consideration.

Information provided in responding to the instructions for Item 3E should address the following review committee evaluation questions:

- *Does the project help Metropolitan avoid or defer construction of capital improvement facilities? To what extent?*
- *Does the project help improve Metropolitan's operational flexibility and system reliability? To what extent?*

Item 3F. Operational Reliability and Probability of Success (scoring range 0-5 points)

- 3F(i) Discuss operational reliability and facility redundancy.
- 3F(ii) Discuss probability of success and project constraints including any environmental or regulatory obstacles.
- 3F(iii) Discuss third party impacts and mitigation measures.
- 3F(iv) Describe the project's ability to deliver product water of satisfactory quality in light of expected, intermittent TDS increases in imported supplies when CRA water is 750 mg/L and SWP water is 450 mg/L.

Information provided in responding to the instructions for Item 3F should address the following review committee evaluation questions:

- *Does the project include features that incorporate engineering redundancy to enhance operational reliability?*
- *Is the technology proven?*
- *Have all third-party issues been resolved?*
- *Will production be curtailed if imported replenishment water is curtailed or imported water experiences high salinity?*
- *Will production be reduced if imported water experiences high salinity?*

Item 3G. Increased Beneficial Uses (scoring range 0-5 points)

3G(i) Explain how the project will lead the way to increased public acceptance of expanded uses.

Information provided in responding to the instructions for Item 3G should address the following review committee evaluation questions:

- *Does the project help resolve broad public acceptance issues for new recycled water uses, superfund water uses or other local resource breakthroughs?*
- *To what extent is the project state-of-the-art within the regulatory arena?*

Item 3H. Cost to Metropolitan (scoring range 0-30 points)

- 3H(i) Complete Exhibit A, Requested Financial Contribution and Pertinent Costs. Schedule should reflect a single unit cost (\$/AF) value per year. Values may not be contingent upon future variables. The proposer assumes all risk on the adequacy of the requested financial assistance. Once submitted, these values may not change and will be used in the final contract, if one is executed.
- 3H(ii) Provide names of all financial partners in project and describe cost-sharing arrangements, if any.
- 3H(iii) For expansion projects, explain the relationship of existing financial assistance agreements with Metropolitan to proposed new facilities.
- 3H(iv) Provide justification for project funding by Metropolitan.
- 3H(v) Complete Exhibit B, Present Worth Analysis for Proposed Projects. Provide information for only years that project sponsor requests Metropolitan financial assistance. Proposals may include terms less

than 25 years and financial contributions below LRP maximum of \$250 per acre-foot.

Information provided in responding to the instructions for Item 3H should address the following review committee evaluation questions:

- *What funding is required of Metropolitan over the life of the project (present worth analysis)?*
- *Over what duration are funds requested?*
- *How would the requested assistance affect Metropolitan's financial rate structure?*
- *For expansion projects, does the proposal present a workable relationship of existing financial assistance agreements with Metropolitan to the proposed new facilities? Would the relationship be advantageous/disadvantageous to Metropolitan?*

EXHIBIT A
REQUESTED FINANCIAL CONTRIBUTION AND PERTINENT COSTS

Total Project Capital Cost \$ _____

Capital Funding Measures:

Source of Funding	Amount (\$)	Interest Rate (%)	Term First Last Yr. Yr
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total:

Assumed Annual Inflation Rate _____ %

No.	(1) Fiscal Year End	(2) Annual Yield (AF)	(3) Annual Capital Cost (\$)	(4) Annual O&M Cost (\$)	(5) Total Project Cost (\$)	(6) ProjectUnit Cost (\$/AF)	(7) Requested Financial Contrib. (\$/AF)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
.							
.							
24							
25							

1. July 1 to June 30
2. Projected annual production in acre-feet, excluding existing uses in expansion projects
3. Annual debt service/amortization
4. Projected annual O&M cost (escalated over time)
5. Annual project cost (3) + (4)
6. Project Unit Cost - (5)/(2)
7. MWD financial contribution requested by project sponsor

RFP No. 1

Exhibit B

6/17/98

Present Worth Analysis For Proposed Projects

Fiscal Year End	(1) Projected Yield AF	(2) Projected Requested Contribution \$/AF	(3) Total Contribution (1)x(2) \$	(4) Present Worth Factor @ 5.5% 	(5) Total Present Worth (3)x(4) \$
1999				1.0000	
2000				0.9479	
2001				0.8985	
2002				0.8516	
2003				0.8072	
2004				0.7651	
2005				0.7252	
2006				0.6874	
2007				0.6516	
2008				0.6176	
2009				0.5854	
2010				0.5549	
2011				0.5260	
2012				0.4986	
2013				0.4726	
2014				0.4479	
2015				0.4246	
2016				0.4024	
2017				0.3815	
2018				0.3616	
2019				0.3427	
2020				0.3249	
2021				0.3079	
2022				0.2919	
2023				0.2767	
2024				0.2622	
2025				0.2486	
2026				0.2356	
2027				0.2233	
2028				0.2117	
2029				0.2006	
2030				0.1902	
2031				0.1803	

TOTAL